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This study to develop an education and training (E&T) system for inmates in Federal correctional institutions described and evaluated existing E&T systems and needs at Milan, Michigan, and Terre Haute, Indiana; formulated an E&T model; and made specific recommendations for implementation of each point in the model. A systems analysis approach was used throughout the study. Weaknesses were found in institutional objectives, vocational training, counseling, educational planning, staff development, and other aspects of existing programs. Elements of the proposed E&T model were objectives, job market information, classification and assignment functions, guidance and counseling service, reward system, instructional staff, curriculum and methods of instruction, job placement service, and evaluation methods. Implications for penal administration and education were also noted, together with expected benefits in terms of helping inmates become productive members of society. (The document includes four charts and one table.) (ly)

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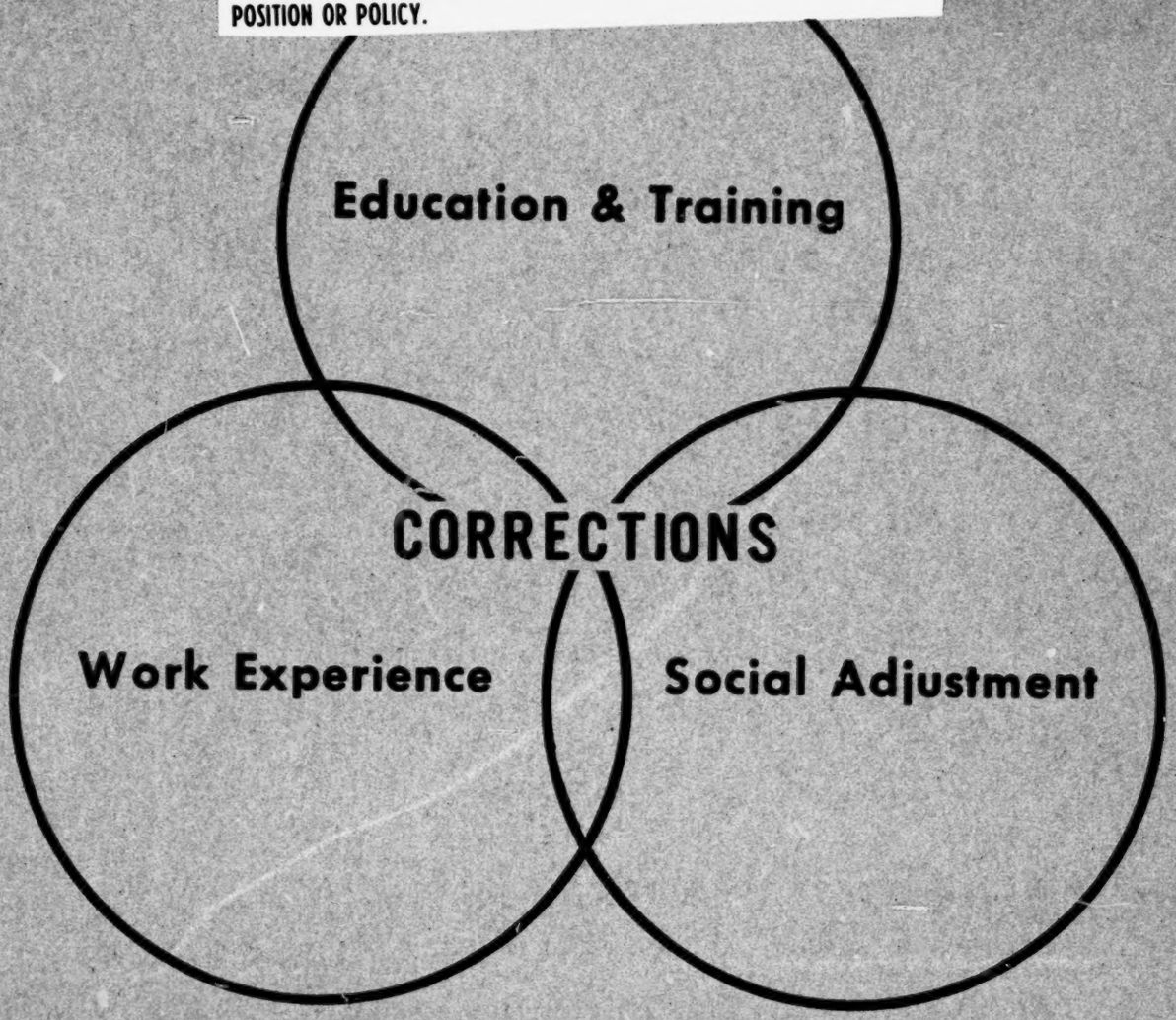

THE DEVELOPMENT OF A MODEL EDUCATION AND TRAINING SYSTEM FOR INMATES IN FEDERAL CORRECTIONAL INSTITUTIONS

A Study by the
Columbus Laboratories of Battelle Memorial Institute

Sponsored by Federal Prison Industries, Incorporated

AC 004 215

FINAL REPORT

on

THE DEVELOPMENT OF A MODEL EDUCATION AND TRAINING SYSTEM FOR INMATES IN FEDERAL CORRECTIONAL INSTITUTIONS

to

FEDERAL PRISON INDUSTRIES, INCORPORATED
U.S. DEPARTMENT OF JUSTICE

April 15, 1968

by

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FOREWORD

The evolution and development of penal theory, to a large extent, has been a derivative of the external social environment. Prior to 1750, the state assumed the vengeful role of punishing the criminal--a role formerly belonging to the victim or his kinsmen. Later in the eighteenth centry, evangelical sects pressed for abandonment of punishment and retribution. Solitude and penitence were adopted until the post-Civil War reform movement introduced the idea of rehabilitation. Influenced by the emerging social sciences, these reformers emphasized the view of the offender as a person with emotional and moral deficiencies that should be improved to a point that would permit the offender's return to the free community.

Current writings evidence a shift away from the rehabilitation objective. The most progressive theorists propose correction as a more desirable objective. A modern penal system cannot be satisfied by returning the offender to the free community in his former capacity, but insists that it must provide the skills necessary to elevate and expand the offender's capacity. While subscription to this correctional objective is widespread, it must be recognized that these theories are largely the outcome of humanitarian impulse and are not necessarily based on scientific and rational processes.

Although successive theoretical innovations have advanced treatment methods from brutality in the 1800's to correction through guidance and training in the 1900's, the ultimate correctional mission has not changed significantly in two centuries. The purpose of the institution remains to protect society while effecting behavioral changes in the inmate. The current available research on the effectiveness and efficiency of the nation's correctional system echoes one common plea. The time is ripe to abandon the preconceived theories as to the proper ratio of "revenge, restraint, and reformation" to be utilized. The time is ripe to adopt a rational and scientific attitude toward the development

of correctional methodologies. The time is ripe to ask, "What demonstrated processes are effective behavior modifiers and how can these processes be integrated into the prison programs"?

Current evidence indicates recidivism of 30 to 50% and the correctional population growing at nearly 4% per annum. Corrections is at a threshold. Increased effectiveness is no longer a desirable feature; it is a mandate. The efforts of the correctional programs must coordinate on the unified goal--behavioral change of offenders and interim protection of society. Education and training (E&T), custody and care each have an important role and none can afford to fail or relax in its efforts.

Recognizing the importance of a scientific and rational approach to corrections, the Federal Bureau of Prisons has undertaken serious re-examination of its policies and procedures. It was proposed that one of the first programs examined be education and training. In the interest of analyzing specific E&T program and developing recommendations for an improved E&T system, the Bureau sponsored this reported study with the desire that it lead to a more efficient, effective, and scientific E&T program for correctional institutions.

ACKNOWLEDGEMENTS

A number of people made significant contributions to this study. Mr. Charles List and Mr. Tony Young - the Training Directors at Terre Haute and Milan, respectively - provided invaluable assistance throughout the course of the project. Mr. Charles R. Hagan, Mr. Olin C. Minton, and Dr. Garland Wollard of the Bureau of Prisons provided a great deal of useful background information during the problem-definition phase of the study - but were impartial observers during the remaining phases. Significant contributions to the study also were made by several Battelle staff members: John L. Coffey, Ronald J. Cress, Benjamin B. Gordon, Horace W. Ray, Helen Samuels, and John R. Stock. A word of thanks to all of these people.

W.D.H. and N.R.A.

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INTRODUCTION

I. INTRODUCTION

Commencing with the "reformatory movement" late in the nineteenth century, American correctional institutions have dedicated themselves to the proposition that neither hard labor and silence nor protection of society were workable missions. Correction of offenders is now recognized as both theoretically and pragmatically desirable. Currently, the greatest share of the correctional responsibility is assumed by the education and training branch of the correctional institution.

It therefore follows that the U.S. Bureau of Prisons desire the education and training programs in the Federal correctional institutions achieve maximum efficiency and effectiveness. It is with this desire in mind that the Columbus Laboratories of Battelle Memorial Institute, under sponsorship of the Bureau of Prisons, carried out a research project designed to investigate specific education and training programs. Executed during the time period of September 15, 1967, to May 1, 1968, the prime objective of the project was to develop practical recommendations for improving the education and training of inmates in Federal correctional institutions.

To achieve the stated objective, the following plan of attack was adopted. Two institutions, the U.S. Penitentiary at Terre Haute, Indiana, and the Federal Correctional Institution at Milan, Michigan, were selected as target populations for an in-depth analysis of their existing education and training programs. The general research strategy consisted of three major work phases:

Phase I: Analysis of the Existing Education and Training Systems.

The purpose of this phase was to describe and evaluate the education and training systems at Milan and Terre Haute. Information was obtained by the following means: (1) study of relevant reports provided by the Bureau of Prisons, (2) interviews with staff members and inmates at Milan and Terre Haute, (3) observation of classes and facilities at Milan and Terre Haute, and (4) study of instructional materials used at the two institutions.

Phase II: Specification of the Characteristics of a Model Education and Training System for Inmates.

This phase involved the formulation of characteristics of an improved education and training system in the form of a "model" system. This model system, which is based upon the concepts of general systems theory, is defined as one that is most likely to satisfy the intended purpose of education and training, within the given constraints of the correctional system.

Phase III: Formulation of Recommendations for Implementing the Model System.

The relation between the actual E&T systems and the model system was analyzed, and an attempt was made to determine the reasons for any discrepancies. Alternative routes for moving from the actual systems toward the model system were considered, and their consequences were evaluated.

This report covers the following topics:

(1) A discussion of the problems associated with education and training of inmates at Milan and Terre Haute.
(2) A listing of the assumptions underlying the proposal for a model education and training system.
(3) A description of the ingredients of a model E&T system.
(4) A presentation of recommendations for implementing the model system.

PROBLEMS

II. PROBLEMS

The analysis phase of the project uncovered the following important problems*:

(A) Vagueness and conflict in institutional objectives.
(B) Lack of a planned education and training program.
(C) Insufficient opportunities in vocational training.
(D) Absence of on-the-job training.
(E) Lack of an effective reward system for motivating inmates to participate in E&T.
(F) Inadequate individualized instruction.
(G) Inadequate inmate counseling.
(H) Lack of an efficient administrative system for E&T.
(I) Lack of a planned program for staff development.
(J) Lack of systematic program evaluation.

These problems, which are discussed below, were prevalent at both Milan and Terre Haute. Furthermore, in discussing our analysis with various staff members within the Bureau of Prisons, it seems that most of these problems also exist at other Federal correctional institutions. The basic thesis of this report is that the solution of these problems will be a major step toward the development of an effective program for educating and training inmates throughout the Federal correctional system.

A. Vagueness and Conflict in Institutional Objectives

One of the most serious problems affecting the education and training system is vagueness of institutional objectives. What is the major purpose of a correctional institution? Is is punishment of the offender? Is it custody? Is it maintenance and operation of the institution? Is it to make a profit from Prison Industries? Or is it correction of the offender? The philosophy of corrections has changed significantly over the past several

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* The background information for this phase of the study is included in: "An Analysis of the Education and Training Systems at Milan, Michigan and Terre Haute, Indiana", by W. D. Hitt, N. R. Agostino, and R. J. Cress, Battelle Memorial Institute, April 15, 1968.

decades, and, further, there seems to be a considerable lag between the time at which a new philosophy is introduced and the time at which the philosophy is actually implemented. Because of the vagueness of institutional objectives, it is difficult to formulate a clear picture of the role of education and training in the correctional system.

A second and related problem is the severe conflict between institutional subsystems. The dominant motive of Prison Industries is to generate profits; the primary purpose of Prison Maintenance is to operate and maintain the institution; and the objective of the education and training system is to help prepare the inmate for success in the free community. The objectives of these various subsystems frequently come into conflict. If a man leaves his job assignment during the day to attend class, a manpower shortage is created. If a man leaves his Prison Industries assignment to take a full-time V.T.* assignment, another manpower problem is created. If a man is able to leave his non-paying job in Prison Maintenance to obtain a paying job in Prison Industries, then Maintenance is left short. If an inmate chooses to earn money in an Industries job that provides no useful skill, then his long-term personal development may be seriously impaired. Yet the correctional system - especially the vocational training program - depends on profits from Prison Industries, and without Prison Maintenance the institution cannot reasonably care for its inmates.

These are serious problems. It is apparent that there is a great need for a definitive statement of institutional objectives along with a statement of priorities.

B. Lack of a Planned Education and Training Program

A plan is generally addressed to two major questions: (1) Where do we want to go? and (2) How do we get there? A systematic plan for education and training would involve a clear statement of objectives, an organized program to accomplish these objectives, and a detailed budget required for carrying out the program. Such a plan should specify what is to be done, how it is to be done, when it is to be done, and who has the responsibility for

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* Vocational Training

seeing that it gets done. No such plan exists at either Terre Haute or Milan. In both cases, a great deal of the education and training program has just evolved, coming into existence without purpose or plan.

The overall E&T program has a number of important components: Academic Education, Study Release, Vocational Training, OJT* in Prison Industries, OJT in Prison Maintenance, Social Education, and Work Release. These different elements fall in different departments and, in general, are uncoordinated. Academic education is not closely tied to vocational training; job requirements in Prison Maintenance and Prison Industries have little relation to V.T.; V.T. has little relation to Work Release; and, in general, Social Education is diffuse and unspecified. Further, there is an obvious lack of job market information to guide the curriculum planning in the area of vocational training.

There is an obvious need for: (1) a clear statement of objectives for the entire E&T program, (2) a clear statement of objectives for each aspect of the E&T program, and (3) a clear statement of the relation between and among the various aspects of the E&T program.

C. Insufficient Opportunities in Vocational Training

The V.T. programs at both Terre Haute and Milan have restrictions on the number of men that can be accommodated. During the time at which this analysis was carried out, Milan had approximately 600 inmates and Terre Haute had 1200. The majority of these men - approximately 75% - are unskilled. The vocational training courses, however, are designed to accommodate only a small percentage of these men. Consequently, the needs of the majority of the inmates with respect to vocational training cannot be met.

D. Absence of On-the-Job Training

One of the stated objectives of both Prison Industries and Prison Maintenance is to provide meaningful training for inmates. It is apparent, however, that there is little semblance of on-the-job training in either

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* On-the-Job-Training

Prison Industries or Prison Maintenance. A man learns primarily "by doing" or by receiving assistance from a buddy; but there obviously is no systematic method used to provide skill training.

These are some of the contributing factors: (1) supervisors do not view training as a significant part of their jobs; (2) supervisors are not trained to be instructors; (3) the needs of the moment invariably have priority over training; and (4) there is a high turnover rate of inmate personnel in a given skill area.

It would seem that both Prison Industries and Prison Maintenance offer considerable potential for providing meaningful on-the-job training. Unfortunately, this potential is not being realized.

E. Lack of an Effective Reward System

One inmate operates a loom in the textile mill and earns $50 and three days of "good time" each month; another provides maintenance service for the mill and earns nothing. One man works as a clerk in the Education and Training Division and earns meritorious pay; another serves as an instructor or tutor and earns nothing. The inmates and the staff alike feel that there are many inequities in the institutional reward system for inmates. When "good time" and money are viewed as such precious rewards, even the slightest of inequities is viewed as unfair. There is an obvious need for a more equitable reward system. This problem is especially relevant to education and training because of the importance of motivating inmates to participate in the E&T program.

The majority of inmates at Terre Haute and Milan are school dropouts (approximately 95%). Some finished only the second or third grade; some made it to the tenth or eleventh grade; but most of them dropped out of school between the seventh and ninth grades. These men were considered to be failures in the public school system - both by others and by themselves. Therefore, it is not reasonable to assume that these men will now be motivated for academic achievement or even respond favorably when the idea of "school" is reintroduced to them.

Another difficulty results from the inmate's inability to see a relation between his work assignment and his particular course of instruction. For example, if a man is working as a spray-painter in the factory during the day and then learning grammar and arithmetic at night, he probably sees no relation between the two activities. As a consequence, both the job performance and the class performance suffer from the lack of apparent mutual support.

A fourth problem is seen in the inmates' defeatest attitude toward possible employment in the free community. Many of the men were unable to obtain desirable employment "on the street" - often because of lack of education and training - and they frequently gave this as the reason why they turned to crime. Now the situation is even worse: they have a record.

These are important problems. They point up the crucial need for an effective reward system to motivate inmates to participate in education and training.

F. Inadequate Individualized Instruction

There is great variety among the inmates at Milan and Terre Haute. Some are serving sentences of 18-24 months, while others are serving sentences of 10-15 years.* Some have a high school diploma but no skill, others have a skill but no diploma, and many have neither diploma nor skill. Some are illiterate, and others are avid readers. The IQ's range from "mentally retarded" to "near-genius".

As a result of these wide individual differences, there are many different individual needs with regard to education and training. One man needs some employable skill; another needs three or four credits in order to obtain a high school diploma; another needs to learn good work habits; while still another needs to learn the basic social skills needed for everyday living. The education and training program is not designed to meet these individual needs. For example:

- The courses of instruction are not designed to accommodate the individual differences among the inmates enrolled in the courses.

*Also, many of the inmates at Milan are serving indeterminate sentences.

- The system does not allow an inmate to complete a course of instruction at his own pace.
- The system provides little opportunity for individual tutoring.
- The high school program is not designed to meet the needs of the inmate who needs only a few particular credits for a high school diploma.

Correction of these deficiencies could lead to a much-improved E&T system.

G. Inadequate Inmate Counseling

A number of inmates interviewed in this study complained that they had insufficient opportunity to communicate with their case workers to discuss their work assignments and/or their E&T program. One reason for this problem is that the case worker usually is working at the institution during the same hours the inmate is working at his job assignment; consequently, the inmate may have little opportunity to see his case worker unless there is some reason for a "call-out". A second reason for the problem is the fairly high turnover of case workers, which is brought about by resignations, transfers to other institutions, or transfers from one unit to another in the same institution. As a result, there is a lack of continuity in the relation between the inmate and the case worker.

H. Lack of an Efficient Administrative System for E&T

A well-managed education and training program is dependent upon an efficient administrative system. Tests must be scored, grades must be recorded, evaluations must be made, classes must be scheduled, assignments must be changed, cost data must be recorded and analyzed, purchases must be approved, and many other administrative tasks must be carried out. These functions must be carried out in an efficient manner.

At the present time, the administrative system for E&T is inadequate. At Terre Haute, for example, inmates are performing sensitive tasks, such as administering tests and recording test scores, and senior staff members in the Education Department are performing many routine administrative tasks that a junior clerk could handle. As a second example, it was found at Milan that the Superintendent of Industries is responsible for the Vocational Training budget and must approve all purchases in this area, which leads to considerable inefficiency. It also was found at Milan that there is frequently a delay of several weeks - or even several months - in receiving books, material, and equipment after they are ordered. Such delays can seriously disrupt an E&T program. Further, there are serious scheduling problems at both institutions; e.g., E&T gets relatively little "prime time" during the normal work day, and the many "call-outs" interfere with the work of Prison Industries and Prison Maintenance.

A well-designed administrative system could result in a considerable improvement in the overall operation and management of the E&T program.

I. Lack of a Planned Program for Staff Development

The instructional staff members have a wide variety of backgrounds. Some have been trained in the field of education; others have been trained in a particular vocational area; while still others have been transferred from some other department in the institution into the Education Department. All of these people have particular needs with regard to their professional development. There is no planned program designed to meet these needs.

The many new developments in education require a well-informed staff for their effective implementation. Included here, for example, are such topics as contingency management, methods for formulating instructional objectives, programmed instruction, and the application of the PPB System* to education. All of these rather recent developments should be applicable to the institution's E&T program; therefore, it is essential that the instructional staff be skilled in their application.

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*Planning, Programming, and Budgeting

J. Lack of Systematic Program Evaluation

One of the major objectives of a correctional institution obviously is to equip the inmate to earn an honest living in the free community - to help him become a productive member of society. Unfortunately, neither Milan nor Terre Haute has any idea how well this objective is being accomplished. There is no external evaluation to ascertain what happens to the offenders after they leave the institution. Consequently, within the existing organization of the E&T system, there is no method for evaluating the ultimate effectiveness of the E&T program.

There also is a lack of internal evaluation of program effectiveness. For example, instructional courses are sometimes taught without providing any grades or systematic evaluation of student performance. Further, cost-benefit data on various aspects of the E&T program are unavailable.

Effective curriculum review and revision require good evaluation methods. This includes overall program evaluation as well as the evaluation of specific innovations. It also includes both internal evaluation and long-term external evaluation. Without such evaluation methods, the E&T program will simply evolve in a capricious manner.

* * * *

This is a brief review of the major problems found in the education and training systems at Milan and Terre Haute. The remainder of the report is addressed to a discussion of some possible solutions to these problems.

ASSUMPTIONS

III. ASSUMPTIONS

The proposed education and training system rests on the following assumptions:

Assumption A: A Federal correctional institution has a twofold objective: (1) to protect society and (2) to effect change in the offender so that he may return to society as a productive member.

- Corollary A-1: Nearly all of the inmates in Federal correctional institutions eventually will be released into the free community.
- Corollary A-2: The inmates will need to support themselves when they are released.
- Corollary A-3: The inmates should have basic education, job skills, and social skills in order to support themselves in the free community.
- Corollary A-4: Inmates are changeable, and the technology to effect this change is presently available.

Assumption B: Only a totally integrated correctional system can really succeed.*

- Corollary B-1: The education and training of inmates must be a totally integrated subsystem.**
- Corollary B-2: The education and training subsystem must be integrated with other subsystems in the correctional system, such as Prison Industries and Prison Maintenance.

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* A statement made by Myrl E. Alexander in a report entitled "Managing Correctional Change", May 22, 1967.

** Whenever the E&T function is being discussed in relation to the overall correctional system, it will be referred to as a subsystem; otherwise it will be referred to as a system.

Assumption C:* It is essential that a correctional institution be maintained in an orderly and efficient manner.

- Corollary C-1: Services provided the inmates, such as food service, laundry, barber, etc., must be adequate to the needs of the inmates and must be performed efficiently.
- Corollary C-2: Maintenance functions such as plumbing, electrical repair, painting, building repair, etc., must be responsive and performed efficiently.

Assumption D: Many of the laws and policies governing the education and training system, such as the use of meritorious pay and meritorious good time, could be modified if sufficient justification is demonstrated.

Assumption E: Considerably more funds will be provided for the education and training of inmates during the next decade than have heretofore been available.

Assumption F: The essential features of a model education and training system for inmates could be applied to all Federal correctional institutions in which the education and training of inmates is viewed as a major objective.

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* Assumption C may be viewed as a realistic constraint imposed upon the E&T system.

INGREDIENTS OF A MODEL E&T SYSTEM

IV. INGREDIENTS OF A MODEL E&T SYSTEM

The purpose of this section of the report is to describe the ingredients of a model E&T system. A "model" education and training system is defined here as one that is most likely to satisfy the intended purpose of education and training of inmates, within the given constraints of a correctional system.

The proposed model E&T system is based upon the concepts of general systems theory. The essential characteristics of a systems approach to E&T are:

(1) The E&T system is viewed as a whole--as an assemblage of interrelated elements.

(2) All aspects of the E&T program are directed toward the accomplishment of system objectives.

(3) Objectives are specified in measurable terms.

(4) Efforts are directed toward the maximization of system performance within the particular constraints imposed upon the system.

(5) Evaluation of system performance and appropriate corrective action take place on a continuing basis.

The proposed model E&T system has these ingredients:

(A) Education and training objectives

(B) Job market information

(C) Classification and assignment function*

(D) Counseling and guidance service

(E) Reward system

(F) Instructional staff

(G) Curriculum and instructional methods

(H) Job-placement service

(I) Evaluation methods.

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* The classification and assignment subsystem is separate from the E&T subsystem in a Federal correctional institution; however, its great importance to E&T warrants its inclusion in the discussion of a model E&T system.

The interrelated nature of these ingredients is shown in Figure 1, which portrays the flow of information through the E&T system. There are actually many more connections and feedback loops in the system than actually shown in this figure, which portrays only the most important ones.

The characteristics of the proposed model E&T system are presented below.

A. Education and Training Objectives

The purpose of E&T objectives is to provide precise direction for the design, organization, construction, and evaluation of the E&T program. E&T objectives provide the foundation and framework for all of the remaining ingredients of the model E&T system.

Characteristics of objectives for the proposed model E&T system are:

- The objectives are related to, and consistent with, the overall objectives of the correctional system.
- The objectives are formulated in terms of job requirements in the free community.
- They are stated in operational terms.
- They are interrelated with the objectives of Prison Industries and Prison Maintenance.
- They are organized and sequenced in accordance with clearly formulated priorities.
- They are attainable.

B. Job Market Information

The collecting and maintaining of job market information has a twofold purpose: (1) to provide inputs to the formulation of E&T objectives and (2) to assist the offender in job placement. This information is an integral part of the model E&T system.

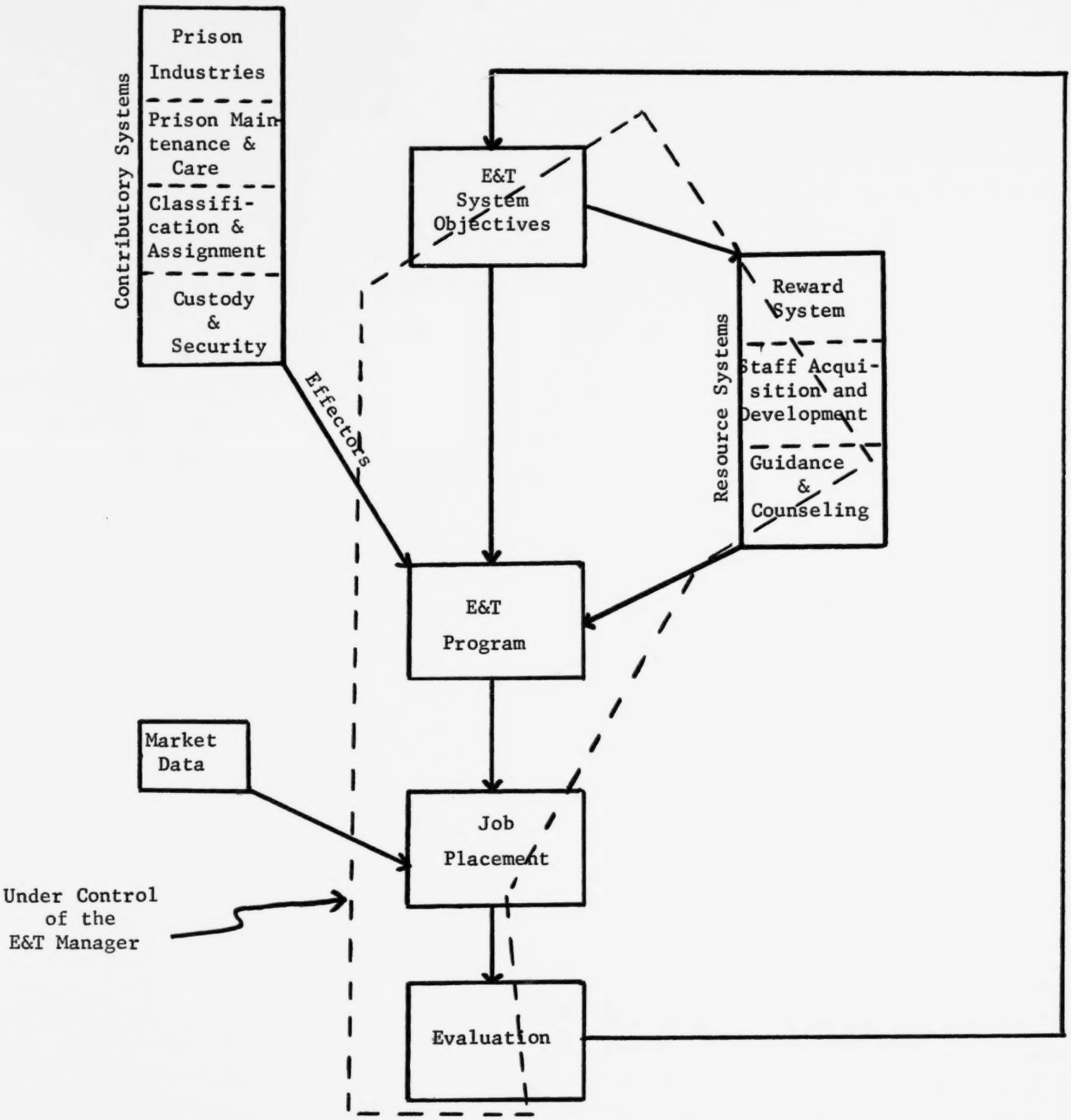

FIGURE 1. INGREDIENTS OF A MODEL EDUCATION AND TRAINING SYSTEM

The characteristics of job market information in the model system are:

- Job market information is specific rather than general (e.g., "transmission mechanics" rather than "mechanics").
- The specific jobs are organized by job clusters or job families.
- Job market information is described in terms of skill and education requirements.
- Job market information is organized and maintained by sub-regions within each state.
- The restrictions associated with the hiring of offenders are indicated for each job and by geographical region.
- Names and addresses of potential employers are indicated to the extent possible.
- Projections of job opportunities are made for two- to five-year cycles on a continual basis.

C. Classification and Assignment Function

The purpose of the classification and assignment function is to place each inmate in an E&T program and a job assignment (within the institution) that will help him become a productive member of society. Ideally, the classification and assignment function places the right person at the right place at the right time.

These are characteristics of the classification and assignment function in the model E&T system:

- The classification and assignment function interrelates: characteristics of the inmate, requirements for enrollment in various aspects of the institution's E&T program, skill requirements for jobs within the institution, and job requirements in the free community.
- Readily available information is maintained on: E&T openings in the institution, job openings in the institution, and job opportunities in the free community.

- This function includes a comprehensive and accurate diagnostic program.
- The tests used in the diagnostic program are: (1) valid, (2) reliable, and (3) objective.
- The inmate has a good understanding of the options open to him before he makes a decision regarding his own E&T program.
- Inmates participate in the classification and assignment process. A "contract" is agreed upon between the inmate and his case worker.
- Each inmate remains in a given program until his contract is satisfied - unless unusual circumstances warrant a change.

D. Counseling and Guidance Service

A major purpose of the counseling and guidance service is to provide the inmate with assistance, encouragement, and feedback with respect to any aspect of his education and training program. This service is designed to tie together the inmate's E&T program, his work assignment, his social adjustment, and his preparation for returning to the free community.

- The counseling and guidance service has well-qualified counselors, people who are trained and experienced in this profession.
- The service provides the inmate with accurate information regarding opportunities open to him as well as his performance.
- Inmates are able to obtain useful job market information from their own commitment regions as well as other regions that might be of interest to them.
- The counseling and guidance service is readily available to each inmate.
- There is continuity in the relation between the inmate and the counselor (or case worker).

E. Reward System

The reward system has a twofold purpose: (1) to motivate inmates to participate in education and training and (2) to motivate them to perform well in E&T. The reward system is based upon principles of operant conditioning and contingency management.

The reward system has these characteristics:

- Motivation of inmates is accomplished primarily by reward rather than punishment.
- Emphasis is placed upon success experiences rather than failure experiences.
- Reinforcement is contingent upon the demonstration of the desired behavior.
- The quality and quantity of rewards are consistent with the quality and quantity of the learner's performance.
- Both immediate and long-range rewards are included in the system.
- The reward system appeals to the strongest motives of inmates (e.g., desire for freedom, desire for economic gain, and desire for prestige).
- The nature of "good" performance is clearly understood by the learner.
- The system includes self-evaluation and reinforcement.
- The rewards given for performance in E&T are compatible with other objectives in the institution.
- The rewards for performance in E&T are sufficiently great to compete with the rewards for performance in other sub-systems of the institution.
- The reward system is compatible with conditions in the free community.

F. Instructional Staff

The purpose of the instructional staff is to administer and coordinate the entire E&T program in an efficient and effective manner. Instructional personnel in a correctional institution must have most of the characteristics required of instructional personnel in other types of settings as well as some additional characteristics uniquely required for the institutional environment.

The characteristics of the instructional staff in the proposed model E&T system are:

- The instructors are knowledgeable in their fields, which includes the ability to perform the skills to be taught.
- The instructors are well-trained in instructional methods, including: specifying instructional objectives, development of lesson plans, use of appropriate instructional media, application of contingency management, and construction of performance tests.
- The instructors have rapport with the inmates and have their respect. (The instructors understand the jargon of the inmates, but do not use it.)
- The instructors keep up-to-date in their fields of specialization, in educational technology, and in the fields of corrections in general.
- The instructional staff is organized in such a manner as to capitalize on the strengths of each member.

G. Curriculum and Instructional Methods

The purpose of the curriculum and instructional methods is to provide the basic education, job skills, and social skills needed by the inmate to become a productive member of society. Curriculum deals with what is to be taught, and methods with how it is to be taught.

The proposed model E&T system has a curriculum and methods with these characteristics:

- The entire curriculum is designed in terms of the stated objectives of the E&T system.
- The curriculum is well-integrated, relating all aspects of E&T in general education, vocational training, social education, OJT in Prison Industries, OJT in Prison Maintenance, and Work Release.
- Curriculum design is greatly influenced by the projections of job opportunities in the free community.
- The E&T program is designed to provide direct support to Prison Industries and Prison Maintenance to the extent that this is practical.
- The courses of instruction are challenging and interesting to the inmates.
- The program is designed to provide individualized instruction.
- The program develops a core of generalizable skills related to a cluster of occupations rather than just those related to one specialized occupation.*
- The overall curriculum is organized in terms of individual units, which provides for maximum flexibility and efficient evaluation.
- The curriculum includes specialized courses designed to assist the inmate in job placement, such as job interviewing and personal grooming.
- The instructional methods selected for each aspect of the E&T program are selected on a cost-effective basis.

H. Job-Placement Service

The purpose of the job-placement service is to assist the inmate in obtaining a job in the free community. The inmate's E&T program, his work

*Taken from "Designing an Organic Curriculum", by Robert M. Morgan and David S. Bushnell, U.S. Office of Education, November 1966.

experience in the institution, and his overall capabilities are related to the job opportunities in the free community.

The characteristics of the job-placement service are:

- It maintains detailed job market information by geographical region.
- It has detailed information on each inmate likely to be seeking employment in the free community.
- It has an efficient means for comparing "profiles" of inmates with "profiles" of job requirements.
- It actively seeks employment for the inmate.

I. Evaluation Methods

The purpose of evaluation is to systematically assess all aspects of the E&T program and to provide guidelines for improving the program. Within a systems framework, any aspect of the program would have value to the extent that it contributes to the accomplishment of the objectives of the E&T system.

The characteristics of the evaluation program in the model E&T system are:

- The evaluation program is designed in direct accord with the objectives of the E&T system.
- The evaluation program is complete: it covers all significant aspects of the E&T program.
- Both immediate objectives (internal) and long-range objectives (external) are evaluated.
- The evaluation is diagnostic: it points up strengths and weaknesses of each aspect of the E&T program as well as what corrective action should be taken for improving the program.
- Evaluation instruments are valid, reliable, and objective.
- The evaluation takes place on a continuing basis.

- Cost-effectiveness data are provided for all significant aspects of the E&T program.
- Each innovation introduced into the E&T program carries with it a systematic evaluation method.
- The record-keeping procedure associated with the evaluation of E&T is designed so that the information is comprehensive, well-organized, coded for computer use, easy to maintain, easy to retrieve by anyone needing such information, and standardized for all Federal correctional institutions.

* * * *

This completes the description of the proposed model education and training system. We turn next to recommendations for implementing the system.

RECOMMENDATIONS FOR IMPLEMENTATION

V. RECOMMENDATIONS FOR IMPLEMENTATION

To implement the proposed model education and training system, we recommend the actions presented below.

A. Education and Training Objectives

Recommendation A-1: Formulate a set of objectives for each Federal correctional institution.

To develop E&T objectives, it is necessary to first establish the broad goals and general purposes of the Federal correctional institution. Ideally, these goals should reflect the values and reason of qualified correctional experts. It is prudent to recognize, however, that several other value systems may affect or constrain these goals, e.g., social, political, and economic values. It is important to recognize the constraints for what they are and not to falsely consider them goals (e.g., the goal of Prison Industries may be to provide effective OJT and not to generate profits, although political, financial, and business-labor values constrain achievement of this goal).

It is desirable that the Bureau of Prison's Central Office work with wardens and their associates in formulating these goals, and consider constraints only as constraints on goal achievement, and not as factors influencing goal formulation. From broad goals, specific objectives must be developed for each institutional subsystem: Prison Industries, Prison Maintenance, Custody, Treatment, etc. These specific objectives must be organized and sequenced in accordance with clearly stated priorities, and, above all, stated in operational terms.

Virtually all current writers attempting to describe the factors taken into account when designing an educational system or program have paid particular attention to the operational specification of objectives.*

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* Teaching Machines and Programmed Learning, II, Edited by R. Glaser, First Edition, National Education Association, Washington, D.C. (1965), "The Analysis of Instructional Objectives for the Design of Instruction" (R. M. Gagne), pp 21-65.

Why is this an important step in the design of a system or program? Precise specification of objectives in operational terms has two primary benefits. First, it specifies the expected outcome in a way to allow measurement of performance. Second, it facilitates the selection of appropriate means to reach the desired goals.

What are the criteria of an operationally specified objective?

(1) Specify the behavior or the state that will be accepted as evidence that the system has achieved the objective.

(2) Define the desired behavior or state by describing the important conditions under which the behavior or state will be expected to occur.

(3) Specify the criteria of acceptable performance by describing how well the system must perform to be considered acceptable.

EXAMPLES:

a. "To understand the principles of salesmanship" - not an operationally stated objective.

b. "To be able to name the parts in a GM automatic transmission" - an operationally stated objective.

c. "To know the plays of Shakespeare" - not an operationally stated objective.

d. "To be able to write balanced chemical equations" - an operationally stated objective.*

Recommendation A-2: Formulate a set of objectives for the education and training system in each institution.

These objectives should apply to the entire treatment program dealing with changing the attitudes and behavior of inmates. Included here would be general education, vocational training, social adjustment, OJT in Prison Industries, OJT in Prison Maintenance, Work Release, and other aspects of the E&T program. These objectives should be formulated

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* For a more complete discussion of operational objectives see Mager, R. F., Proposing Instructional Objectives, Fearon; Palo Alto (1962).

on the basis of two criteria: (1) the contribution to the attainment of institutional objectives and (2) the compatability with "real world" skill requirements. Further, the objectives should be stated in operational terms, and they should be attainable.

It is recommended that the theoretical framework developed by Abraham Maslow be used to structure the objectives for the E&T system.* Using this framework, we could arrive at these three levels of objectives: (I) Essential, (II) Desired, and (III) Ideal. Examples of objectives at these three levels would be:

(I) Essential: Each inmate should have minimal skills required for obtaining a job in the free community.

(II) Desired: Each inmate should be at least semi-skilled in some trade for which there is a demand in the free community.

(III) Ideal: Each inmate should be at a skilled level in some trade for which there is a demand in the free community.

All objectives could be organized within this framework. Priorities could then be established accordingly.

It is further recommended that especial attention be given to the formulation of objectives for social adjustment.** Examples here might be:

(1) To manifest much coping with everyday problems, and little defense.***

(2) To set realistic goals and strive to accomplish them.

(3) To engage in both competition and cooperation in a mature manner.

(4) To interact with the staff and other inmates, in a mature and responsible manner.

(5) To be able to postpone gratification.

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* Reference A. H. Maslow's Motivation and Personality, New York: Harper & Row, 1954.

** Because: (1) it is an extremely important area, and (2) it has received relatively little attention in the past.

*** These objectives are stated in rather general terms; the next step would be to extend them to a more specific level.

Finally, it is recommended that the Director of Education at the Central Office meet with the E&T Directors (and others) from the correctional institutions over an extended period of time to formulate these objectives.

B. Job Market Information

Recommendation B-1: Develop a system for acquiring and analyzing job market information.

Generating reliable job market data is an arduous and expensive process requiring skilled specialists. For this reason, Battelle's manpower economists recommend that neither the local institutions nor the Bureau of Prisons initiate independent data collection. Many public and private sources (e.g., the U.S. Employment Service, the U.S. Department of Labor, Scientific Research Associates, and the Upjohn Institute, etc.) currently formulate widespread national, regional, and local job market information. Both the Bureau of Prisons and the local institutions must make every effort to avail themselves of this stream of information and become actively involved in the total manpower forecasting effort. It is our recommendation that the Central Office lead the way in establishing liaison between existing information sources and the correctional system and insure that the correctional system takes full advantage of all potential sources of job market data.

While the correctional system need not generate its own data base, some qualification and adaptation of the available data for the prison population will be mandatory. Although community, employer, and union attitudes are hopefully malleable, a realistic outlook demands that these constraints be considered when adapting the free-community data to the correctional population. Inasmuch as this adaptation process will be subject to local influences and variations in constraints, it is recommended that the local institutions, in cooperation with specialists from both the public and private sectors, assume this adaptation function.

Recommendation B-2: Use the job market information in the future planning for Prison Industries.

The job market information would be of definite value to curriculum development and job placement of inmates. In addition, it would be of great value in the selection of new industries for Prison Industries. For example: It may be apparent that a given industry provides little useful training for inmates. It also may be apparent, however, that this particular operation cannot be dispensed with "overnight". Hence the question: If the industry is to be phased out over, say a five- to ten-year period, what type of industry should be established in its place? While a number of different factors obviously would have to be taken into consideration for making such a decision, accurate job market information would serve as one important input for answering this question.

C. Classification and Assignment Function

Recommendation C-1: Develop an efficient management information system for the Classification and Assignment function.

This system would contain information on: inmate characteristics, present and predicted openings in instructional courses, present and predicted job openings in Prison Industries and Prison Maintenance, as well as job opportunities in the free community. The information should be well organized and stored for quick retrieval. It is recommended that the Central Office develop the basic system, in cooperation with representatives of the local institutions, and then implement it in each of the institutions.

Recommendation C-2: Conduct a detailed study of the present testing program.

Nearly all subsystems within a correctional institution are continually confronted with decisions for which they have inadequate information, e.g., Classification and Assignment, Counseling and Guidance, and

Evaluation. The function of an effective testing program is to provide decision makers with the most adequate information possible.

The design and development of a testing program should consider two related elements: the characteristics of the decisions for which the tests will be used and the loss or damage associated with an erroneous decision. While types of instruments vary, their appropriateness should be based on technical accuracy (i.e., validity, reliability, and norms) and relevance to a particular decision being made.

Inasmuch as it appears that many decisions are similar across institutions, it is recommended that the Central Office provide the assistance necessary to develop an effective testing program that can be adapted to each local institution's needs.

Recommendation C-3: Develop a classification system for jobs in Prison Industries and Prison Maintenance.

The Classification and Assignment function could be carried out in a more efficient manner if the jobs in Prison Industries and Prison Maintenance were classified in an efficient manner. This classification system should cover the general assignment, the occupational area, the job, and the skill level required of the job. Moreover, it should be designed for efficient storage and retrieval of information.

A possible job-coding system might be as follows:

First digit - General assignment
Second digit - Occupational area
Third & fourth digits - Specific job
Fifth digit - Skill level

Now, as an example: a code number of 4315-1 might describe this job:

4 - Prison Industries
3 - Welding
15 - Arc welder in metals factory
1 - Entry-level skill

It is recommended that the Central Office take the lead in conducting the job analysis and job description needed to develop the job-classification system. Inasmuch as many of the existing jobs are unique

to given institutions, much of the preliminary work could be performed in the local institution, but the Central Office should insure uniformity between institutions.

Recommendation C-4: Develop an improved orientation program on education and training.

This orientation program should describe the institution's E&T program in some detail. The options open to the inmate should be presented and discussed with him. (A thorough orientation program is valuable only insofar as an offender participates in his own classification and assignment decision.) A booklet describing each institution's E&T program should be prepared and kept up-to-date. Further, it is recommended that each new inmate be given a complete tour of the E&T facility before a decision is made regarding his own E&T program.

Recommendation C-5: Develop a procedure for "contracting" with each inmate regarding his E&T program.

A "contract" would be a mutual agreement between the Classification Team and the inmate regarding the inmate's E&T program. This contract would specify reasonable E&T objectives for the inmate, including what is to be accomplished and when it is to be accomplished. The initial contract would be arrived at after the inmate has been given a complete orientation on the institution's E&T program and has considered and evaluated the various options open to him. Further, it is recommended that this contractual procedure be developed in such a manner to prevent either the inmate or the institution from "breaking the contract" - except when such action obviously would benefit the inmate's treatment or else very unusual circumstance dictate that such action be taken.

D. Counseling and Guidance Service

Recommendation D-1: Establish a work schedule for case workers that increases their availability to inmates.

Case workers should be available to provide counseling and guidance services during those hours that the inmates have free time. In those institutions in which the inmates are at their job assignments from approximately 8:00 a.m. to 5:00 p.m., Monday through Friday, the case workers should be available during the evenings and on Saturday. It is recommended that each local institution work out its own schedule for case workers.

Recommendation D-2: Develop an E&T information system for case workers.

An E&T information system should include current information and data on each inmate participating in the E&T program. The information would include: (1) the trainee's "contract" with regard to E&T, (2) his past and present performance in all aspects of the E&T program, and (3) possible job opportunities. It might be efficient to make this information system an integral part of the information system recommended for the Classification and Assignment function (see Recommendation C-1). In any event, the information should be readily available to the case worker in providing guidance and counsel to the inmate concerning his E&T program. Again, it is recommended that this information system be developed by the Central Office in cooperation with the local institutions.

Recommendation D-3: Formulate a procedure for assuring continuity of relation between inmate and case worker.

The proposed model E&T system requires that a close relation between the inmate and the case worker be established. Such a close relation can serve a variety of purposes, including: accurate assessment of the inmate's performance over an extended period of time and an effective means for motivating the inmate to achieve the objectives specified

in his "contract". The main point here is that the inmate should feel that someone on the staff is well aware of his performance and, further, is interested in his performance. It is recommended that each institution formulate a procedure for assuring continuity of relation between inmate and case worker. Such a procedure might be very simple to devise; for example, an approval at the Warden or Associate Warden level might be required for an inmate to be switched from one case worker to another (unless a case worker leaves the institution, of course).

E. Reward System

Recommendation E-1: Conduct a detailed study of the Federal correctional system's reward system for motivating inmates.

The entire reward system that has some influence on inmate behavior should be investigated in detail. This investigation should cover such areas as these: policy and procedure on parole, financial remuneration for inmates, the use of meritorious good time, the use of Work Release as an incentive, assignment to select jobs and housing, special privileges, and others. The questions to be answered in this analysis would include: (1) How effective have these incentives been for influencing inmate behavior? (2) What are the present constraints upon manipulation of these various incentives? (3) Which of these constraints can be modified?

Recommendation E-2: Develop a new reward system for motivating inmates.

It is recommended that a new reward system be developed for the purpose of motivating inmates to participate in E&T and to perform well in E&T.* This development should proceed approximately according to these steps: (1) Review of the analysis of the existing reward system; (2) Generation of new ideas for the use of incentives to motivate inmates; (3) Evaluation of these new ideas on the basis of present knowledge in

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* This recommendation can be made at this time with assurance, because we are confident that the present reward system can be improved.

behavioral science and the practical constraints imposed upon the use of incentives; (4) Further evaluation of the most promising incentives through experimental studies in selected institutions; and (5) Organization and implementation of an improved reward system.

In developing this new reward system, it is recommended that consideration be given to the use of a "Performance Unit" as an integrating theme. This basic element would encompass the inmate's performance in three interrelated areas: (1) formal education and training, (2) OJT in Prison Industries and Prison Maintenance, and (3) social adjustment (see Figure 2). This concept of the Performance Unit would serve as a meaningful guide for: (1) diagnosis, (2) education and training, (3) evaluation, and (4) motivation. The most important aspect of this recommendation is that it should promote greater harmony between the inmate's E&T program and his work assignment.

F. Instructional Staff

Recommendation F-1: Develop an effective organizational structure for the instructional staff.

Some of the main features of a recommended organizational structure are presented in Figure 3. The E&T Manager provides the overall guidance and direction for the E&T system. Reporting directly to the E&T Manager are: Senior Instructors, an Occupational Research and Development Coordinator, and an Administrative Assistant. The ORD Coordinator should be responsible primarily for coordinating all facets of E&T, including general education, vocational training, OJT in Prison Industries, OJT in Prison Maintenance, Study Release, and Work Release. The Administrative Assistant should be responsible for routine administration and scoring of tests, maintaining E&T records, class scheduling, and routine data analysis. Junior Instructors would be personnel with less than three years of teaching experience, whereas Senior Instructors would have more than three years of experience and also would have responsibility for a given area of instruction. The tutors might be either qualified inmates or college students working on a part-time basis. This recommended organizational structure should allow the effective implementation of team teaching in each institution.

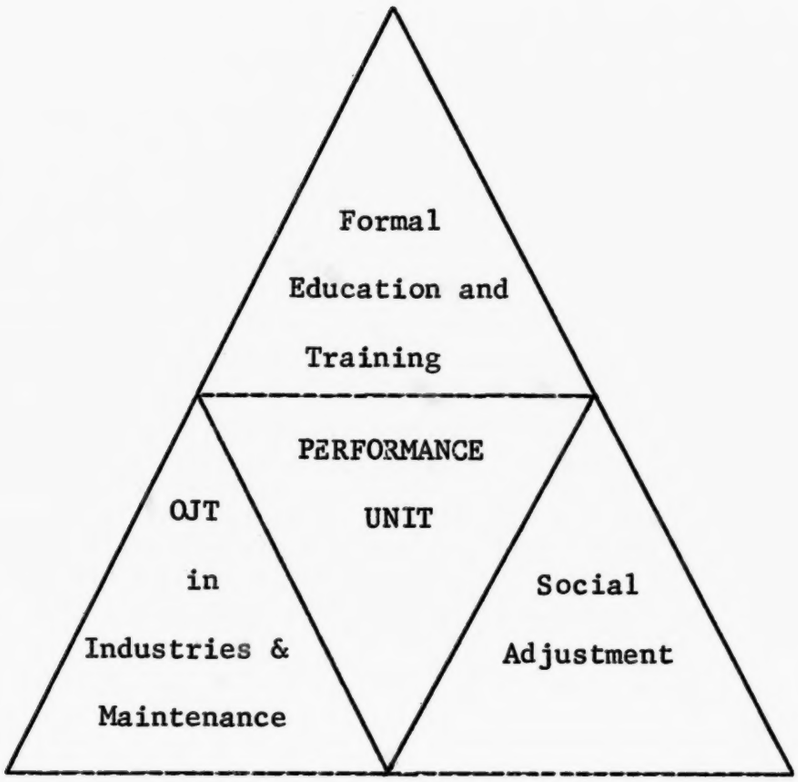

FIGURE 2. INGREDIENTS OF THE PERFORMANCE UNIT

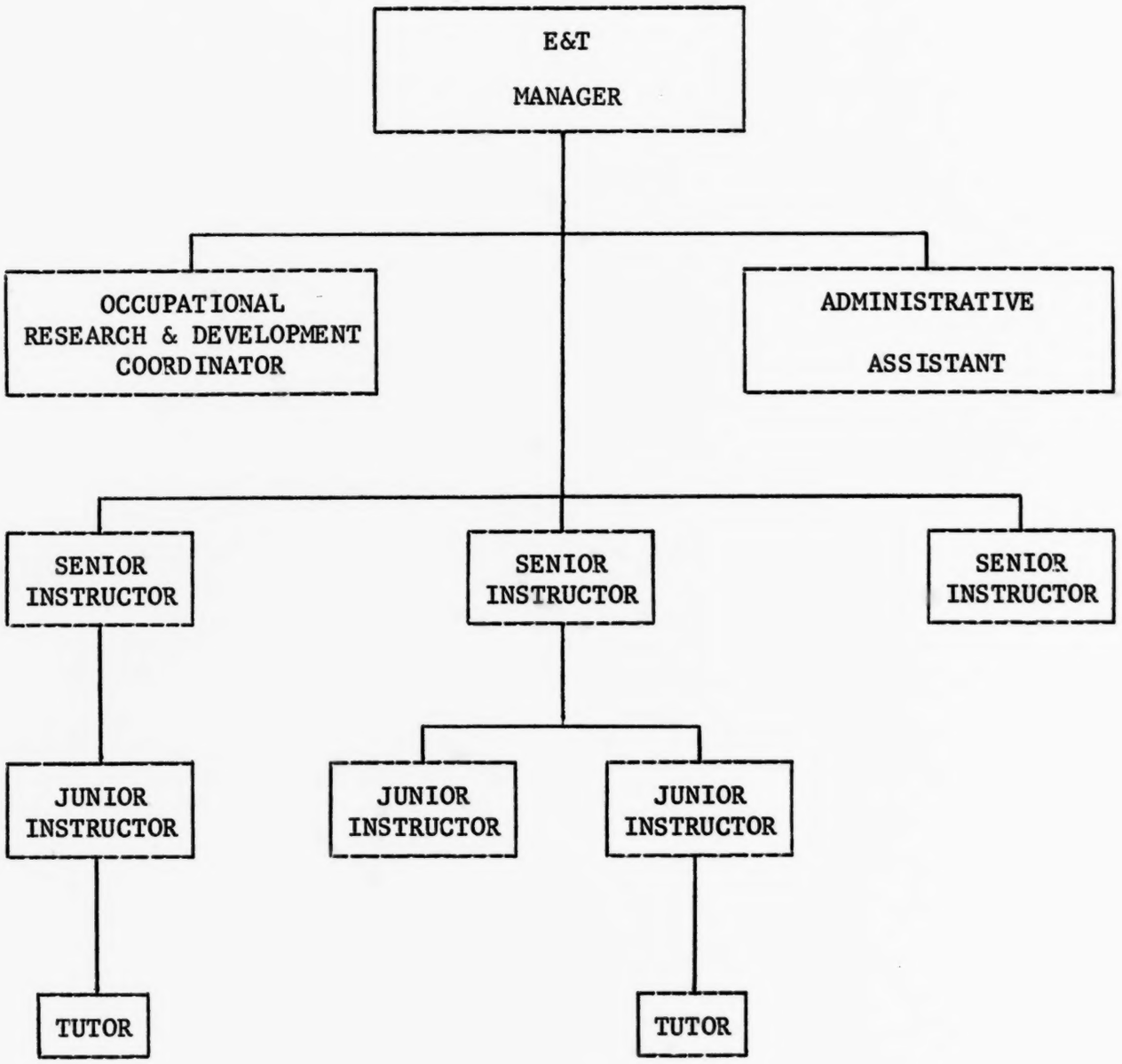

FIGURE 3. ELEMENTS IN A PROPOSED ORGANIZATIONAL STRUCTURE

Recommendation F-2: Develop a procedure for recruiting and selecting instructional personnel.

The local institutions are having a difficult time obtaining qualified full-time instructional personnel. The environment, location, and relatively low entry-level pay are serious handicaps.

It also is apparent that appropriate selection criteria and procedures are lacking. To select the best possible instructors, the following prediction research is needed:

- Job analysis, to identify characteristics that correlate with job success or failure.
- Selection and development of suitable instruments to measure these characteristics.
- Application of an appropriate experimental design to validate the relation between the selection instruments and job success.

The Central Office should undertake the outlined steps to formulate and evaluate reasonable selection standards for instructional personnel.

Also needed is a major recruiting and public relations program. Other governmental agencies (e.g., Peace Corps, VISTA, etc.) have successfully recruited excellent personnel in spite of the job conditions by stressing "public service". It is necessary for the Central Office not only to develop selection processes but to show the responsibility for maintaining uniformly high-quality instructors throughout the correctional system.

Recommendation F-3: Organize and implement a continuing education program for instructors.

A continuing education program should be organized and implemented for the entire instructional staff. It is essential that the staff not only maintain excellence in their E&T specialities, but also become skillful in curriculum design, use of instructional media, contingency management, and test construction.

While some reliance for filling these needs will fall on nearby educational institutions, additional methods of staff education should be considered. Intense one-week workshops, for example, tailored for corrections instructors and combining learning and practice could be periodically offered. Covering one topic per week, it would be possible to effect large gains in relevant knowledge and skill.

It is recommended that the Central Office take a leading role in providing the planning and organizing of staff education. Ultimately, such a program depends on the local institution for success, but the Central Office could, and should, pave the way.

Recommendation F-4: Develop methods for evaluating instructor performance.

Instructor evaluation, developmentally speaking, is still in its infancy. Without digressing into an academic discussion or literature review, we will outline several considerations important to any discussion of instructor evaluation.

While ultimately, instructor performance must be measured in terms of changes in student behavior,* it is recognized that other variables in addition to the teaching process (e.g., non-classroom processes, surrounding conditions, student inputs) may greatly affect student performance. It also is recognized that methods selected for measuring overall student performance establish priorities that may not coincide with a teacher's priorities. For example, the Stanford Achievement Tests or the Iowa Tests of Basic Skills do not measure changes in attitudes or social behavior, the significance of which may outweigh any conventional academic change.

Another consideration deserving of thought is: "What is the intended purpose of teacher evaluation?" It is clear that the end has a significant role in determining the means. If the evaluation is to be utilized not only as an administrative tool but also as a diagnostic aid,

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* Report of the American Educational Research Association, Committee on Criteria of Teacher Effectiveness, Rev. of Educ. Res., 1952, 22, 238-263.

it must not only detect deficiencies but must prescribe steps to overcome deficiencies.

Given the need to measure both teacher and student performance, the current state of the science of measurement, and the desire for administrative and diagnostic outputs, we may ask: What are the characteristics of a sound instructor evaluation program?

First, effective instructor evaluation cannot be accomplished until each course of instruction has realistic, specific operationally stated objectives (see Recommendations A-1 and G-2). Next, administrators, specialists, and instructors must outline specific operationally stated instructional strategies. By comparing student gain to course objectives and by comparing recommended instructional strategies to observed teacher behavior, it is feasible to evaluate both student and teacher performance.

Another outcome of building evaluation procedures on operationally stated objectives and strategies is a built-in diagnostic feature. It points up both the instructionally weak areas as well as the specific techniques that are lacking. Thus, an effective instructor evaluation procedure hinges on one precedent--operationally specified objectives for teachers and students.

G. Curriculum and Instructional Methods

Recommendation G-1: Formulate an instructional strategy for the overall E&T program.

A strategy should be formulated for carrying out the overall education and training program, including general education, vocational training, social adjustment, OJT in Prison Industries, OJT in Prison Maintenance, and Work Release. The instructional strategy would be directed primarily toward: (1) what should be taught and (2) how it should be taught. In addition, it would involve specifying appropriate sequencing of the various elements of the E&T program as well as indicating methods for interrelating various aspects of the program.

Recommendation G-2: Specify instructional objectives for each part of the curriculum.

Instructional objectives should be specified for all aspects of the E&T program, including general education, vocational training, social adjustment, OJT in Prison Industries, OJT in Prison Maintenance, and Work Release. These objectives should be organized in terms of end-objectives and contributing-objectives and should be stated so that they:

(1) Specify the kind of behavior which will be accepted as evidence that the learner has achieved the objective.

(2) Describe the important conditions under which the behavior will be expected to occur.

(3) Describe how well the learner must perform for his behavior to be considered acceptable.

Recommendation G-3: Select and develop instructional materials to meet the instructional objectives.

Present and projected job market information and reorganized and revised educational objectives will accentuate an existing deficiency--the need to develop valid, effective instructional materials to achieve instructional objectives.

We recommend a pragmatic approach to the selection and development of materials to meet the instructional objectives. First, a survey should be made of potential external sources (e.g., Job Corps, Department of Labor, Office of Education, and Department of Defense) that might provide the Bureau of Prisons with instructional materials. While these external sources represent a valuable resource, their applicability and cost-effectiveness must be experimentally verified. Under the sponsorship of the Aerospace Education Foundation, the Columbus Laboratories of Battelle Memorial Institute are currently undertaking a study of the applicability of three Air Force instructional systems to civilian education. While wholesale generalization of the results of this study would be dangerous, the implication of favorable results has broad implication for correctional education.

Second, new materials should be developed only to fill the gaps in instructional materials that cannot be supplied by external sources.

Recommendation G-4: Formulate a multi-media teaching model.

Too frequently, media selection is an afterthought, inserted after the program is designed and used, on the argument that "they are already there" or they are "a good thing".

To make a contribution to the total learning environment, media selection ought to be an empirical part of the program development, based on the requirements of the instructional objectives and the students' characteristics rather than on intuitive judgment. A multi-media system might utilize several presentation modes, including: lectures, programmed instruction, closed-circuit TV, computer-aided instruction, audio-visual presentations, laboratories, role playing, and case studies. These different media, however, must be empirically designed and developed, relevant to instructional strategies, and subject to cost-benefit analysis.

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It is recommended that the Central Office take responsibility for carrying out Recommendations G-1 through G-4. Many parts of this E&T program should be applicable to the majority of Federal correctional institutions, while other parts should be applicable to at least two or more institutions. Hence, there should be considerable efficiency realized through the centralized development of a high-quality E&T program.

H. Job-Placement Service

Recommendation H-1: Develop a job-placement service for inmates.

The development of a job-placement service for inmates would involve a three-step step strategy: (1) Specification of the requirements for an efficient and effective job-placement service; (2) Design of a

procedure for matching job opportunities with inmate characteristics; and (3) Implementation of the service. It is recommended that this service be developed by the Central Office and operated by the Central Office. Such an arrangement would permit the job-placement service to be operated on a national basis--providing numerous opportunities for placing a given inmate from any institution in practically any region in the country. This service, of course, should be closely coordinated with the U.S. Employment Service and private employment agencies.

Recommendation H-2: Provide additional services to assist the inmate in job placement.

It is recommended that each local institution provide a variety of services to assist the inmate in job placement. Consideration should be given to the following: (1) Provide driver training as needed--so the inmate can obtain a driver's license upon release if the law permits; (2) Prepare Capability Folders for each inmate--describing his education and training experience and work experience--which can be submitted to potential employers; (3) Help the inmate obtain a Social Security card if he doesn't have one; (4) Assist the inmate in corresponding with potential employers.

These and other services could be of great benefit to the inmate in his efforts to obtain a job in the free community.

I. Evaluation Methods

Recommendation I-1: Develop methods for evaluating the E&T program in terms of immediate criteria.

Five major purposes of program evaluation are as follows: (1) it furnishes a periodic check on the effectiveness of an institution in bringing about student change; (2) it illuminates the points at which improvements in the E&T system are essential; (3) it validates objectives relative to which an educational institution functions; (4) it yields information essential to effective individual student guidance; and (5) it assists

students and instructors in clarifying their goals and in perceiving concretely the directions which they are taking.*

To be comprehensive and effective, a model evaluation process should incorporate these steps:**

1. State the broad goals of the educational program.
2. Develop specific operational objectives (see Recommendation G-2).
3. Translate specific operational objectives into instructional strategies to facilitate classroom learning.
4. Select and develop instruments to allow judgments concerning the extent the operationally stated objectives have been attained. (See Table 1 for an outline of uses for various types of instruments.)
5. Administer instruments periodically to establish normative data.
6. Determine behavioral changes by:
   a. comparing individuals or groups to normative data,
   b. determining individual or group change relative to an earlier administration of the same or comparable form of an instrument, and
   c. finding intercorrelations among various measures that suggest patterns of interrelationships.
7. Interpret behavioral change relative to both specific behaviorally stated objectives and broad goals.
8. Combine group gain and accounting data to provide cost-benefit analysis.
9. Recommend further implementation and/or modification of objectives.

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*Tyler, R. W., General Statements on Evaluation, J. of Ed. Res., 1942, 35, 492-501.

**Michael, W. B. and Metfessel, N. S., A Paradigm for Developing Valid Measurable Objectives in the Evaluation of Educational Programs in Colleges and Universities, Ed. and Psychol. Meas., 1967, 27, 373-383.

TABLE 1. REPRESENTATIVE LEARNING OUTCOMES AND POSSIBLE METHODS OF EVALUATION

	Types of Behaviors		Possible Methods of Evaluation
A	Application Concept Acquisition Memorization of Facts Problem Solving Reading Comprehension Skills (number, etc.)	A	Objective Test, Product Evaluation, Rating Scale, Checklist
B	Performance	B	Rating Scale, Checklist, Product Evaluation
C	Classroom Behavior	C	Rating Scale, Checklist, Attendance Record, etc.
D	Interest	D	Questionnaire, Checklist, Interest Inventory, Factual Vocabular Test (with words from various interest fields)
E	Attitude	E	Rating Scale, Questionnaire, Checklist, or Objective Test (with factual material that has attitude-loaded responses)
F	Aspiration Level	F	Rating Scale, Interview, Simple Objective Test, Word Association Test, Open-Ended Sentences (psychologist needed)
G	Adjustment	G	Rating Scale, Anecdotal Report, Interview, Sociogram

While there is a plethora of advice on what to do, it would be most profitable for the Bureau to develop procedural guides on evaluation for the E&T directors. Although not complete, the "Guide to Assessment and Evaluation Procedures" published by the New England Educational Assessment Project represents such an effort. This type of a guide, encompassing all nine steps listed above, should be developed for use in all E&T systems. It not only would aid decision makers in developing sound program evaluation, but also would provide outputs in a form useful to researchers.

Recommendation I-2: Develop methods for evaluating the E&T program in terms of long-range criteria.

Methods should be developed for evaluating the E&T program in terms of long-range criteria. These methods should be developed in accord with the objectives formulated for the E&T system, as described in Recommendation A-2, above. While the evaluation methods described in Recommendation I-1 deal with the offender's performance during the period of incarceration, the methods referred to in this recommendation deal with his performance in the free community subsequent to his release from confinement.

The difficulty of obtaining follow-up data on offenders is well realized. Nevertheless, it is essential that a concerted effort be made to obtain such data if an effective E&T program is to be developed. It is recommended that consideration be given to the use of these methods for obtaining follow-up information on offenders: (1) interviews with the released offender (and/or questionnaire); (2) interviews with the offender's parole officer (and/or questionnaire); (3) interviews with the offender's employer (and/or questionnaire); (4) determine if the offender is making Social Security payments or if he is receiving unemployment compensation, etc.; and (5) interviews with recidivists (who may return to either a Federal correctional institution or a state institution).

Recommendation I-3: Develop an information system for program evaluation.

An information system for collecting and maintaining information and data dealing with evaluation of the E&T program should be developed and maintained. One part of this system should deal with immediate evaluation, and should be maintained in the local institution. A second part of this system should cover long-range evaluation, and should be maintained in the Central Office. Both parts of the system should be standardized and organized in such a manner that the information and data can be analyzed using computer techniques.

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It is recommended that the Central Office take responsibility for carrying out Recommendations I-1, I-2, and I-3. The Research Division and the Education Division should work closely in the development of the evaluation methods as well as the development of the information system.

J. Miscellaneous Recommendations

Recommendation J-1: Develop a new assignment schedule for inmates.

The various scheduling problems have been pointed up previously in the report. It is recommended that a detailed analysis be made of the problem concerning the scheduling of inmates' daily activities. Such a study might involve the following steps: (1) Determine the scheduling needs of each subsystem within an institution (including E&T, Prison Maintenance, and Prison Industries*); (2) Formulate several alternative schedules that might meet these needs; (3) Evaluate these alternative schedules; and (4) Implement the schedule that appears to be most reasonable.

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* For example, Prison Maintenance may require the presence of a worker for an 8-hour period of time, but not everyday of the week; whereas Industries may want the man to be on the job everyday of the week, but half-days would be adequate.

Several alternative schedules have been suggested during the course of this study. For instance, it was suggested that consideration be given to a 4-hr/4-hr schedule, in which the inmate works four hours and participates in the E&T program for four hours each day (either five or six days each week). Also suggested is the possibility of a 3 day/3 day schedule, in which the inmate participates in E&T three days each week and works in Maintenance or Industries three days, alternating the days.

In addition to these possibilities, consideration should be given to the problem of when to schedule the various work and training activities during the period of confinement. It is recommended that consideration be given to the framework shown in Figure 4. As indicated here, the inmate first participates in some type of basic E&T after entering the system. This basic E&T might be remedial education and/or training for a job in Maintenance or Industries. He then earns the opportunity to more advanced E&T and a paying job in either Industries or Maintenance. Finally, just prior to his release, he is assigned to a job in the Work Release Program.

It is recommended that each institution take responsibility for improving its own daily assignment schedule, with guidelines being provided by the Central Office.

Recommendation J-2: Investigate additional resources in the local community for education and training of inmates.

It is recommended that each institution assume responsibility for investigating additional resources for E&T in the local community. For example, the Wabash Technical Institute in Terre Haute is planning on establishing a rather comprehensive vocational/technical program, and the Director has indicated that he would be very receptive to enrolling inmates in the program. Further, there may be possibilities for enrolling inmates in local MDTA and OEO programs. Operation Bootstrap* at State Prison Southern Michigan has demonstrated that local governmental agencies,

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* Hoffman, J. F., "Operational Bootstrap", J. Corr. Ed., 14 (2), 18-22 (1962).

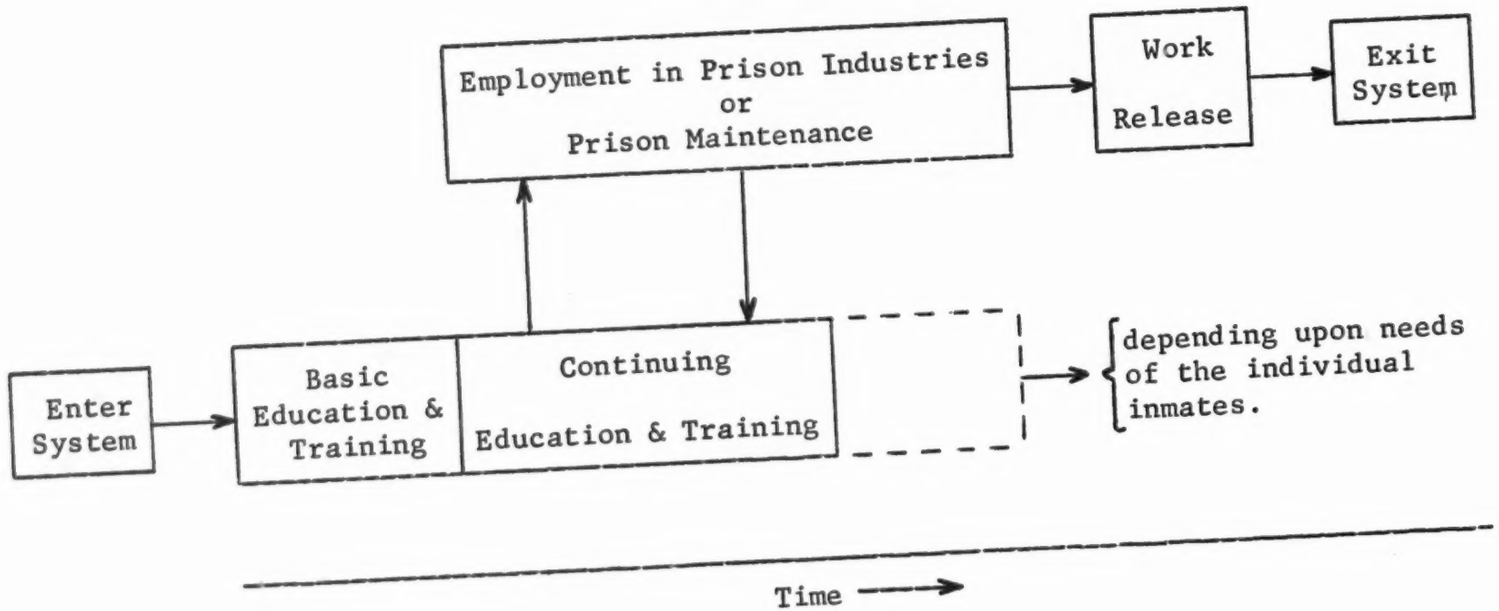

FIGURE 4. A POSSIBLE FRAMEWORK FOR SCHEDULING

business and industry, and service groups will play a meaningful role in E&T if an opportunity is provided. Such resources as these should be investigated for the purpose of determining how they might be used to complement the E&T program within the institution.

Recommendation J-3: Examine the feasibility of centralizing E&T programs.

Centralization of specific E&T programs, especially in the vocational area, may represent a very attractive opportunity for the Bureau of Prisons. Such an approach would permit each institution to specialize in a given type of vocational training, as contrasted with providing a smattering of many types of training. Administratively, centralization eliminates costly duplication and allows the more efficient use of specialists. Technologically, centralization insures the same high quality of educational opportunities for all students; it would allow the more efficient utilization of equipment; and it would permit programs to be broader in scope. Economically, centralization often is less expensive. Elimination of multiple libraries, equipment, and specialists usually more than offsets increased travel expense.

It is recommended that the Central Office conduct a study to determine the cost-effectiveness of a limited and a totally centralized approach to E&T programs, e.g., one auto mechanics program vs. several programs. We recognize that other factors (e.g., location of offender near home) may influence any decision to centralize specific E&T programs, but it is our expectation that such a study would reveal centralization would be beneficial both in terms of cost and quality.

Recommendation J-4: Examine the feasibility of a centralized computer with input/output terminals at each local institution.

Throughout this report, we have recommended the development of management information systems. The applicability of a time-sharing computer with terminals in each institution to process and analyze this information should be considered. Besides serving as the nucleus of a

management information system, a computer located in one institution also could be utilized to: teach computer technology, provide computerized instruction, process and analyze data for research purposes, and aid decision makers. With on-line terminals, each institution could have access to the computer and reduce the average cost per institution.

We recommend that the Central Office investigate the applicability of a computer with terminals in each institution as both an educational and a management tool.

A SUMMING UP

VI. A SUMMING UP

A. Summary

The primary purpose of this study was to specify the ingredients of a model education and training system for inmates and to formulate recommendations for implementing the model system. This entire analysis was carried out within a systems framework, which means essentially that the education and training system was viewed as an assemblage of interrelated elements directed toward the accomplishment of specific objectives. Included in the proposed model system are these ingredients: (1) education and training objectives, (2) job market information, (3) classification and assignment function, (4) counseling and guidance service, (5) reward system, (6) instructional staff, (7) curriculum and instructional methods, (8) job-placement service, and (9) evaluation methods. Specific recommendations concerning each of these ingredients have been formulated.

B. Implications

Acceptance of these recommendations will have a number of important implications for the Bureau of Prisons. Some of these implications are:

(1) Implementation of the proposed model E&T system will require a major overhaul of the present system. Considerable use can be made of existing elements, but major changes will have to be made in every aspect of the existing system--from specifying objectives in operational terms to the development of useful evaluation methods based upon these objectives.

(2) Most of the burden for developing and implementing the model E&T system is placed upon the Central Office. Without getting into a lengthy discussion on the pros and cons of centralization, it seems apparent that a sensitive management at the Central Office will be able

to capitalize on the considerable efficiency offered through centralization of the planning and development function, while at the same time encouraging active participation and involvement of the individual institutions. The highest level of "participative management" is called for.

(3) The development and implementation of appropriate methods for evaluating the education and training program may change the prevailing spirit throughout the Federal correctional system. No longer will an institution be evaluated merely on the basis of number of disturbances occurring in a given period of time or the net profits generated by Prison Industries. Instead, the institution will be evaluated on such criteria as: number of inmates who were taught how to read and write, percentage of the inmates leaving the institution with a useful job skill, and percentage of the parolees who have a productive job in the free community twelve months after leaving the institution. Indeed, this will "change the name of the ball game".

(4) Implementation of the proposed model education and training system will call for a scientific attitude among all those people involved in the implementation. No single E&T system will ever be the final system. Experimentation will be required on a continuing basis, involving measuring, relating, predicting, and verifying.

(5) Description of the proposed model system clearly points up the importance of the management function in education and training. The management responsibilities of planning, organizing, communicating, and evaluating are just as important in this system as they are in any other complex system involving people. This means that education and training must be <u>managed</u> rather than merely allowed to evolve.

These are important implications. We look next at the potential benefits.

C. Benefits

The benefits that should accrue as a result of implementing the proposed model E&T system are listed below:

- A well-integrated E&T program that is cost-effective.
- A closer relation among E&T, Prison Industries, and Prison Maintenance.
- An improvement in job performance in Industries and Maintenance.
- A closer relation between job opportunities in the free community and the E&T program.
- A more efficient Classification and Assignment function.
- A more effective Counseling and Guidance service.
- A larger percentage of inmates participating in E&T.
- Higher performance among those inmates participating in E&T.
- A better-equipped instructional staff.
- An effective job-placement service.
- Useful evaluation methods.

All of these benefits should contribute significantly to the accomplishment of the Federal correctional system's primary objective: to assist the inmate in becoming a productive member of society.

D. Costs

A major point made in this report is that potential benefits associated with various aspects of the proposed model E&T system should be related to costs. It is impractical to do otherwise. Hence, it follows logically that the benefits listed above should be related to costs. While this obviously is an important step, it is beyond the scope of the present study. Nevertheless, it is apparent that the total development and implementation of the proposed model E&T system will cost a great

deal of money. The costs may be considered relatively small, however, if they are prorated over the total number of inmates to be trained and are included in a return-on-investment index reflecting the long-range gain to society.

E. The Next Step

Quo Vadis? Where do we go from here? The next step should be a management conference in which the proposed model E&T system and associated recommendations are discussed and evaluated. All of the individuals who would play a significant part in implementing the recommendations should participate in the conference. Priorities should be established, a time schedule should be delineated, responsibilities should be assigned, and areas for further research should be agreed upon. This should be the first major step in implementing the proposed model education and training system.

F. In Conclusion

The Federal correctional system has come a long way in the last half-century. This circuitous journey has gone from punishment to custody to treatment. The essence of treatment is education and training.

The challenge involved in developing and implementing an effective education and training program for inmates is as great as Mt. Everest. Entering the correctional system are many of society's "Marginal Men"--illiterate, unskilled, and undisciplined; but leaving the system should be "Productive Men"--literate, skilled, and disciplined. Indeed, this is no small task. The greatest amount of ingenuity, resourcefulness, and patience will be required. Our knowledge of behavioral science tells us that we cannot expect miracles in this endeavor. Realistically, however, we can expect improvement--and certainly sufficient improvement to warrant the cost. The reward to be achieved from this effort will be worthwhile: it will be a greater number of "Productive Men" and a smaller number of "Marginal Men" leaving the correctional institution to return to the free community.

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